

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) OPERATOR

DISTINGUISHING FEATURES

The fundamental reason the ITS OPERATOR exists is to provide operational support for the Intelligent Transportation System and Traffic Management Center. This classification does not supervise. Work is performed under general supervision of the Traffic Engineering Director. The ITS OPERATOR is distinguished from the ITS Analyst by providing day to day coordination of the operational aspects of the Traffic Management Center, including regular interaction/information exchange with other Traffic Management Centers in the local area, and development of emergency signal timing adjustments, incident detection and work zone coordination with other City departments, Police, Fire and state agencies.

ESSENTIAL FUNCTIONS

Learns and keeps abreast of the latest ITS technologies and innovations. Quickly becomes proficient in the day-to-day operations of these technologies when deployed.

The position will be responsible for the daily operations of the Traffic Management Center. The ITS OPERATOR is required to assist in managing traffic through Scottsdale during the peak hours of traffic flow, detect incidents, alert media, post incident and accident messages on the City's Variable Message Signs, and implement the Roadway Closure and Reporting System through the ADOT Traffic Operations Center and other municipality Traffic Management Centers.

The ITS OPERATOR will be required to develop, analyze and make signalization timing changes, implement responsive and adaptive signal timing (under the guidance of the Traffic Engineering Director, ITS Analyst, or the appointed representative), that best suit daily traffic demands, incident mitigation demands, and special events. The ITS OPERATOR will also be responsible to develop emergency signal timing plans for all of the City's traffic signals, under the direction of the Traffic Engineering Director, ITS Analyst, or the appointed representative of the Traffic Management Center.

The ITS OPERATOR will observe and manipulate multiple live video images to consistently evaluate traffic congestion and maximize roadway capacity of existing roadways through thorough, ongoing signal timing plans.

The ITS OPERATOR will assist the Traffic Engineering Director, ITS Analyst and Transportation staff in developing long term strategic planning efforts to reduce or eliminate bottleneck locations or optimize the network including providing for improved, more efficient transit options using ITS.

Assist in integrating new technologies with existing systems and help resolve compatibility issues with both hardware and software.

Conducts in-field observations to test traffic signal timing and related ITS operations.

Tracks signal and ITS system problems and works closely with Transportation and Traffic Signal maintenance staff to resolve issues in a timely manner. Prepares analytical studies and makes verbal and written recommendations for innovative changes to Scottsdale's ITS/Traffic Management System. Implements changes to traffic signal systems to deliver efficient, cost effective, superior service.

Assist in development of engineering specifications, design and implementation of a variety of ITS technologies.

May assist in troubleshooting and repair or design of ITS related equipment.

MINIMUM QUALIFICATIONS

Knowledge, Skills, and Abilities

Knowledge of:

Traffic Engineering principles, telecommunications, ethernet and IP networks, current ITS theories and practices, NTCIP architecture, Transcore Series 2000 Automated Traffic Management System or closely related real-time signal timing systems operations. Proficient in Syncro Version 5, and be able to learn the newest Version 6 when purchased, and familiarity with different systems, camera control software, VMS software, and signal control systems, including adaptive and responsive systems.

Ability to:

Read and interpret blueprints and schematic drawings.

Visually distinguish the full color spectrum.

Listen and effectively communicate ideas, technical advice, recommendations in one-on-one, small groups and large group settings through oral, visual and written communications. Prepares quality written materials.

Produces written documents with clearly organized thoughts using proper sentence construction, punctuation and grammar.

Makes oral and written presentations to other City Departments, Transportation Commission and other City boards and commissions.

Works cooperatively with other City employees and the general public. Responds to public inquiries regarding signal timing issues.

Operate a computer and a variety of office equipment using continuous and repetitive arm, hand and eye coordination.

Education & Experience

Any combination of education and experience equivalent to a Bachelor's degree, in Traffic Engineering, Civil Engineering, Computer Science or a related field, and a minimum of twelve months experience with computerized traffic signal systems including video monitoring systems, automated traffic counts systems, responsive and adaptive traffic signal timing, and traveler information systems. Must obtain and possess a valid standard Arizona drivers license, with no major driving citations in the last 39 months.

FLSA Status: Non-exempt

HR Ordinance Status: Classified